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Policy

The U. S. Navy Medical News Letter is basically an official Medical Department publication inviting the attention of officers of the Medical Department of the Regular Navy and Naval Reserve to timely up-to-date items of official and professional interest relative to medicine, dentistry, and allied sciences. The amount of information used is only that necessary to inform adequately officers of the Medical Department of the existence and source of such information. The items used are neither intended to be nor are they susceptible to use by any officer as a substitute for any item or article in its original form. All readers of the News Letter are urged to obtain the original of those items of particular interest to the individual.

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Notice

Due to the critical shortage of medical officers, the Chief, Bureau of Medicine and Surgery, has recommended, and the Chief of Naval Personnel has concurred, that Reserve Medical Officers now on active duty who desire to submit requests for extension of active duty at their present stations for a period of three months or more will be given favorable consideration. BuPers Instruction 1926.1B applies.

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Operation Deep Freeze

Medical officer volunteers are urgently desired for operation Deep Freeze II. Must have 24 months' obligated service or agree to extend. Details outlined in AlNav-4, 1956.

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Residency Training in Allergy

There will be a space available for a resident in Allergy at the U. S. Naval Hospital, San Diego, Calif., beginning April 1956. Applications are invited from Regular officers and Reserves who have completed their obligated service. Prior training in Internal Medicine of one or more years is a prerequisite. (ProfDiv, BuMed)

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Naval School of Hospital Administration

The U.S. Naval School of Hospital Administration, primarily a naval training school for officers of the Medical Service Corps and Hospital Corps, has functioned at the National Naval Medical Center, Bethesda, Md., since mid 1942.

In 1946, the school's function was expanded to include courses for enlisted hospital corps personnel. The added courses included clerical, property and accounting, and commissary procedures. In 1948, these courses were consolidated into one curriculum leading to certification as Medical Administrative Technician.

The authorized number of students currently attending the school is 40 officers and 100 enlisted personnel. This is the maximum number of students the School's facilities will accommodate.

The School was established on 3 August 1942 as a Training Department of the U.S. Naval Hospital, National Naval Medical Center. On 12 July 1943, the School was officially designated as the Hospital Corps Officers School under the command of the Commanding Officer, U.S. Naval Hospital, with a Hospital Corps Officer as Officer in Charge. On 2 August 1945, the School was established as a separate command of the Medical Center and was designated as the U.S. Naval School of Hospital Administration with a Medical Service Corps officer as Officer in Charge. Later, this title was changed to the present designation, Commanding Officer. The School was moved to its present location, Building 141, in January 1946. The Naval School of Hospital Administration is a tenant command under the National Naval Medical Center and receives logistic support from the Center and the other various component commands.

At first, the School was restricted to officer students. The course of instruction was limited to 6 months and was designed to embrace technical areas of finance, personnel, and food-service management. Since then, the course has been extended to approximately 10 months and the curriculum broadened to include the specifics for all administrative divisions of a naval hospital. To increase the effectiveness of the specifics, basic courses in English, Effective Speaking, Business Mathematics, Personnel Management, Accounting, and Fundamentals of Instruction have been included.

The graduates of the School, sixteen classes, represent a total of 696 officers. Included among the graduates are 40 officers from other Services: 9 U S. Army, 28 U.S. Air Force, 1 Ecuador Navy, 1 South Korea Navy, and 1 Chinese Nationalist Navy.

A separate course for enlisted personnel was started in July 1948. The course has been developed to cover all areas of medical administrative procedures. Graduates are designated as Medical Administrative Technicians upon the completion of approximately 10 months of training. To date, a total of 969 technicians have been graduated.

The administrative offices, library, auditorium, publications, training-aids library, and six classrooms are located in Buildings 141 and 142.

The School library, under the immediate supervision of a civilian Library Assistant, is a branch of the Edward Rhodes Stitt Library of the National Naval Medical Center. The School library contains approximately 3800 selected volumes which provide a ready reference in the fields of hospital administration, education, and training. Through the facilities of the Stitt Library, an additional 35,000 books, journals, and pamphlets are made available to staff and student personnel.

The aim of the School is to provide the motivation and opportunity for officers of the Medical Service and Hospital Corps to develop understandings, abilities, and skills which will constitute a foundation for the officer's self-development and which will serve as a basis for the officer's growth in the administrative field. This being a Service school, emphasis is necessarily directed at technical areas that are specifics for the various administrative divisions in a governmental-military hospital--specifically a naval hospital. Within this naval framework, the curriculum and the methods of instruction have been designed for the development of transferable skills, resourcefulness, and analytical capacity. The simple acquisition of the knowledge of highly specialized and transitory facts or techniques has been minimized.

The objectives for each unit of the curriculum are developed from the major aim, and an emphasized corollary to this aim is the development of an appreciation and an understanding of the human relations aspects involved in administrative action in any endeavor.

Although the abilities and understandings required for a competent administrator cannot be attained in 10 months, the course does impart a knowledge of the facts and techniques for the effective supervision of the various administrative divisions of a naval hospital. With the achievement of the objectives in the school's program, the student is given an effective start in his acquisition of these abilities and understandings.

To augment the course of instruction at the School, other governmental and civilian facilities are utilized in the training program. Field trips, in addition to the various facilities of the Naval Medical Center, are made to the National Institutes of Health, a number of food-service facilities, a meat-packing facility, sewage disposal and water treatment plants, a dairy and milk plant, and a produce market.

In view of the periodic rotation of military instructors, the academic backgrounds of the military staff vary slightly from year to year. However, through the increased utilization of the instructors from the teaching staffs of local universities, through the increased employment of prominent civilian lecturers, and through the selective assignment of staff military personnel, the status of the faculty has been greatly improved.

Four courses are taught exclusively by civilian instructors from local universities. Civilian lecturers, specialists in their fields, are employed on a part-time basis. Military specialists from the Navy Department and civilian specialists from other agencies provide lecture service in their specialties.

In the Hospital Administration Course, there are 1323 classroom hours, practical and didactic, covering a period of approximately 9-1/2 months. Subjects covered are: (1) Accounting, (2) Administrative Law and Uniform Code of Military Justice, (3) Business Mathematics, (4) Effective Speaking, (5) English, (6) Environmental Sanitation, (7) Financial Management, (8) Food Service, (9) Fundamentals of Instruction, (10) Maintenance and Safety Engineering, (11) Office Management, (12) Personnel Management, (13) Personnel Records and Administration, (14) Report Writing, (15) Security, and (16) Special Services.

An indoctrination course for medical administrative officers of the Naval Reserve has been designed to provide ample coverage of the basic duties and responsibilities of the Medical Service Corps Officers in Medical Department organization and administration to enable them to serve effectively as assistants in the various administrative divisions of a naval hospital while receiving on-the-job training. The course was offered in the summer of 1953, and although only 8 weeks in duration, it closely paralleled the course content in Hospital Administration. The framework for this program still exists and can be utilized in future planning. (Naval School of Hospital Administration, NNMC)

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Grow the Green Grass Here

The grass is always greener on the other side of the fence. A cliché, yes, but also one way of expressing the motivation behind the departure of alarming numbers of men from the Armed Forces.

Civilian pastures are painted in verdant tones by talent hungry personnel managers. Rising business indexes set the hearts of eager men to palpitating. Every one can make a million once he goes back to college and invests a little of Uncle Sam's money and his own time in self-improvement. The vista is so overwhelming that those who intend to stay on this side of the fence have everywhere adopted the defensive against the stampede to civilian life. Instead of selling our own yard and tearing down the fence, we have built the fence higher. Yet, there stand the walls of China to pay mute tribute to the folly of such a philosophy. Just as they were inadequate to withstand the hordes trying to get into China, so will all the walls built of increased pay, better fringe benefits, and other emoluments be inadequate to hold in the Armed Forces an adequate number of career officers and men if we don't try to sell them on the ideological and philosophical value of a military career.

The problem of whether to stay in or get out is probably as old as the Navy. Every officer in the Navy has probably asked at some point whether the struggle was worthwhile. And, as many articles have said recently, this question is being resolved in a manner disappointing and disastrous to the military efficiency of the Defense establishment. From 1950 to 1954, the Army reenlistment rate decreased fivefold, the Navy's decreased to an eighth of its previous rate, and the Marine Corps and Air Force suffered similarly. Thousands of words of testimony before Congressional bodies have belabored compensatory and other dollar benefits. The high cost of housing near military installations, the cost of maintaining two wardrobes, damage incurred to household goods, and other troubles have been described. We read that Communist aviators receive in cold cash buying power about 20% more than their American counterparts and enjoy fantastic fringe benefits. We are told that a civil service seaman makes twice as much as a U.S. Navy seaman who is married. Classified ads in newspapers seek to hire truck drivers, carpenters, electricians, and mechanics for \$1300 and \$1400 a month—for work overseas. Dollars are not the answer. You can't attach a dollar sign to the kind of responsibility a man in the military is called upon to shoulder. Even if you were able to, public reaction would never sanction legislative recognition of its true worth. The best soldiers in history have more often than not been underpaid, underfed, and overworked. So the answer must lie elsewhere.

Although the old adage, "You'll never grow rich in the Navy, but you'll never starve," still stands, even with the latest pay raise, pay isn't and never will be the answer.

The question of putting to sea in ships arises. Wise men, manned with intelligence to aid them in calculated risks and IBM machines to balance commitments against availability, have done everything in their power to meet the need of more ships overseas and at the same time keep more men near their families, and more families where they want to be. Operation Gyroscope and the Magic Carpet runs are tributes to their efforts. But as long as the nation needs a Navy, the Navy is going to have to send men to sea and away from their families. Even this seemingly hopeless liability has rewards to be found and held up proudly, but no one has done it for the poor man questioning a career. The rejuvenative effect of a break in family routine is never described. The man who rides the Long Island Railroad every morning for years and years and comes home on the same train in the afternoon, and his wife who goes to the same grocer and the same baker for the same length of time, slip into an insidious rut and frequently cease to appreciate each other. But, Navy families know that separations come, and consequently each member can see more clearly the worth of the other. Still another factor that is never mentioned is that a man and his wife can actually come to know each other better while apart. We humans are an inhibited bunch and there are some ideas that we can't ever put across by means of the spoken

word which slide nicely into letters. Whole new planes of mutual ideas can be built up in this way to provide more enjoyment when man and wife come together again.

No social entity can be held together by materialistic devices alone. A social entity must be bonded by a belief in the ideals which motivated it and by a willingness on the part of each individual to defend those ideals — with personal sacrifice if necessary. If a society is not motivated by a sound ideology and is not willing to defend that ideology at personal loss to the individuals concerned, it will fly apart at the first sign of adversity.

Defending a society is a complex and ever-continuing process, as dynamic and vital in peace as in war. Spiritual and intellectual leadership must be provided, and these, in turn, must be protected. And yet, the clergy has always been underpaid in worldly goods and teachers have been the constant economic victims of taxpayers associations bent on holding down the real estate taxes. These two categories then are sacrificing themselves to protect our way of life and there are thousands of other underpaid over-worked volunteer "defenders of the faith" whose jobs could never be rationalized in terms of dollars and cents and whose work would be uninspired if it were so rationalized.

The word volunteer is important in the military also. One of the obligations of a society is to defend itself and its privileges from those who would rob it. Empirically, for the foreseeable future at least, a part of that protection is a sound military posture.

The day has passed when we can sit back and say, "Let George do it." International struggles and tensions, whether they manifest themselves in war, cold war, warm peace, or plain peace, are all encompassing. They are no longer limited to the family feuding of kings and the financial warfare of industrial barons. Only a realization of this principle and a hearty belief that we have something worth hanging on to will shake us away from our self-centered individualism sufficiently to produce a collective sense of social obligation which will produce enough top-caliber men who will stay voluntarily with the Service despite loss of pay, officers' clubs, commissaries, and other privileges, despite inexplicable operating procedures and bureaucratic obtuseness, despite unpleasant duty stations and a thousand other irritations. Because, if these men have this conviction, they will know that they must stay with the Service if we are to maintain a sound foundation under what we are loud to proclaim as the finest way of life yet generated within man's knowledge.

This collective attitude is hard to come by in an age of plenty. Once this attitude is implaced in our ideology, our problems will be solved, because then a man in the military can weather the disruptions of family life, tiresome institutional frustrations, and the day-by-day minutiae, and see the grand picture and the true worth of a career.

In addition to the necessity for providing enough soldiers and teachers and preachers to support our way of life, we each have a responsibility to our

own self-respect. A man must do more than earn his daily bread. Life must be led in such a way that we can look back on it and know we've given all we had to give. The whole Christian philosophy is anchored here, and from this principle, stem some of the most valuable psycho-therapeutic tools. The life of the financier is not complete until he has endowed a charity. All of the thousands of lay and civic organizations give active proof of the fact that we realize we must do more than merely sate our own earthly appetites. The man who does no more than put a good roof over his family's head and provide them with good food, school, clothes, and education is not a complete man until he has done something which he feels will make the world a better place. And a man can do no more for his society than to devote his career to that society's protection. The satisfaction gained from the pursuit of this life despite material and emotional inconveniences will enable a man to look himself in the face in peace, knowing that he is doing as much in a lifetime as any man can.

Fully believing this, and being reasonably adapted to military life, a man would need no further persuasion to make a career of the Armed Services.

However, there are other considerations that are worthy of note because they seem to be almost universally ignored and unanimously unappreciated. First, there is the matter of recognition and of pride in one's work. Industrial psychologists agree that these rank ahead of monetary benefits in holding employees. Recognition of the higher echelons in the business world is equally important in the eyes of management as is evidenced by the rigid protocol that governs the distribution of office space, expense accounts, and secretaries. Companies even publish manuals that fix such matters as rigidly as Uniform Regulations differentiate between captain and commander.

Yet, when the junior and senior vice president leave the home office and go out into a new town, there is no recognition automatically accorded to either of them. They must sell themselves to a new community. Whereas, the man in the Service not only belongs to an organization that purveys a prestige product, but he also is accorded an instant recognition by virtue of the fact that he wears the uniform. He has "arrived" as soon as he does arrive in a new community because he is a known quantity to the people. This is so despite all the journalistic snipings at the military in recent years. It doesn't take him years to become a pillar of the community because the community is ready to accept him as such on arrival.

Pride in one's work has become more difficult in civilian life as the years have gone by. The inexorable rules of economics and technology have done away with craftsmen and replaced them with button pushers. But the man in the Navy will always have much more than a button to push. Pride in its most justifiable form comes continuously from seeing men mature under good leadership, from seeing these men directed in maintaining and training a combatant ship, from learning new situations in a minimum of time and knowing that one's work and training will save lives, money, and property.

The next intangible asset of the man in the military is a strong feeling of belonging, identification with a dynamically motivated cohesive group. Most people are basically gregarious and preponderantly extrovert. There are very few complete individualists in the world. In some men, this need for identification is fulfilled by business completely. However, in the civilian world there are very few men who find this sufficient and almost every man belongs to the vestry of his church, or the Lions, or the Elks, or the Bar Association, or the Masons, or the Grange, or one of thousands of other fraternal or lay organizations, all of which substantiate by their existence the need for belonging. The Navy or the Army or any other branch of the Service satisfies this need infinitely more than any civic organization.

Finally, on the subject of identification, the cause for which one works is a strong determinant of the cohesiveness of any group. Needless to say, the cause for which the Navy exists, namely the preservation of the state, is as fundamental and important as any cause save that of the Church.

Another psychological need of man is better satisfied by the Navy life than by a great many other careers. That is the need to draw satisfaction from one's work on a day-to-day basis. There is no job that so constantly imposes responsibility on the individual as does the Service life. Now, much has been said about the taking away of responsibility from officers and petty officers, and there is a certain amount of rationalization in these accusations by men who don't want to take on the responsibility. The man who cares, if he could physically stand it, could work 24 hours a day and still not accomplish all that needs to be done. The junior officer has a tremendous opportunity to shape and mold the lives of his men for good or bad, and just to exert a favorable influence on them is a full time job. As a man moves up the chain of command, he then must work with and on his junior officers. It is a real challenge just to keep abreast of the technological revolution as it affects the Navy and to see that we are ready to extract as much from the machines as they have been built to give. The man who can't derive satisfaction from working in these directions will never find satisfaction in any work.

Another asset of the military man is often labeled as a liability and rather neatly illustrates the point that we have been unnecessarily on the defensive in trying to keep our officers and men. Many people moan and groan about change. "I get settled into a job and two years hence, I'm routed out and sent on my way." The man in the Service has the opportunity to shift from one horizon to the other. If personality clashes arise in one spot, one knows that there will be another spot in a finite length of time. But the cynic asks, "Won't that personality clash cost a man his next promotion?" That, of course, depends upon the junior and how successful he can be in sublimating his resentment. In any event, it is safe to say that it will result in no more, and probably less, damage than in a comparable civilian situation.

Under the heading of change as an asset falls the favorite recruiting slogan, "Join the Navy and See the World." This phrase is so commonplace

that its value is not appreciated. Extremely few civilians have both the time and the money to do the traveling that falls to the Navy man and, in a great many cases, to his family. Not only does the Navy man visit spots that would cost a mint to visit as a civilian, but he also gets to live in a great many of them and that is infinitely more valuable than "staying in Frisco tonight, hit L. A. tomorrow, Las Vegas the next day," to quote a typical tourist card sent home. Within the States themselves, he lives in the North and the South and the West. He becomes a better citizen because of this and his country means more to him. Even if he doesn't like any part of the country as well as his original home, he at least has satisfied himself that the grass is greenest on his own side of the fence.

But let us exploit another line of thought, the matter of broadening one's outlook on life—the process of becoming a cosmopolitan as opposed to the provincial. No matter where a man is, or what he does, if he wants to stay narrow-minded he will stay that way. Some of our most provincial citizens come from the largest cities, whereas, some of our most enlightened and sophisticated philosophers have had nothing but bucolic roots. However, if a man is interested in improving his mental perspective, there is no place better than the Navy. The senior officer today must have a working knowledge of economics, politics, law, diplomacy, management, technology, and the arts, to mention but a few, in order to be able to properly harness the organization placed in his charge and lead it to its ultimate goal. He must be an astute observer of human nature—which is a fascinating pursuit in itself—in order to work his men most effectively. He must be able to meet and deal with all strata and classifications, and, to do this, he must be an expert in humanity. In that, the Navy is a noble calling and draws strength from spiritual support, he must appreciate the various religions and be religious himself. Because the tools of our profession and the techniques of handling them have changed more in ten years than in two hundred before that, and because they promise more rapid changes ahead, he must practice mental flexibility and work at banishing dogmatism and pedantry from his mentality. The man that realizes all these things, and does something about them, will have a broad outlook and a rational mature philosophy.

These, then, are some of the commodities that the Navy has to sell: a means of meeting one's social responsibility, a means of building one's self-respect, a means of satisfying one's need for recognition, pride in work and identification, a means of providing daily satisfaction, a means for providing stimulation through change, and the necessity for broadening one's outlook. In most cases, the Navy has a product of better quality in each instance than any other concern in the country, but it probably has the worst sales force in the world. I have already referred to statistics and they have been talked about and been written about to the point that, when you do run into a man who is making the Navy a career, you are ready to embrace him on the spot.

This situation exists at a time when we need a dedicated cadre of regulars to back up our national policies more than we ever have before; at a time when there is more international tension than ever before; at a time when there is more apocalyptic ammunition in the hands of international henchmen than ever has been before; and at a time when we are blessed with a material well-being as no nation in recorded history ever has been blessed.

Yet, this appalling attrition in Service personnel exists when it costs more and takes longer to train a man than ever before and at a time when we are rapidly reaching the point at which industry can supply the machines, but we can't provide the men to run them.

Why does this situation exist? There are two big reasons. In the first place, as we nationally have increased our material blessings we have not commensurately increased our collective sense of social obligation. Too many Americans have forgotten the old axiom that with privilege goes responsibility, and that if we neglect our responsibility, the privileges are apt to vanish in the smoke of a nuclear holocaust.

In the second place, we in the Navy have allowed our critics to astigmatize our vision to the extent that we have ceased in a great many instances to believe in ourselves. When we cease to believe in ourselves we can't sell our way of life to those coming up behind us.

What is to be done? Evangelism is tremendously successful in the churches and is just as appropriate in the military. Evangelism is an obligation on the part of every communicant of every church, as a reading of certain passages of the Bible will show. It should also be an obligation on the part of every career man in the Navy. If we can believe these tenets ourselves and go out and sell them, all the rest of the materialistic problems will resolve themselves in the good order of time, and our recruiting problems will cease to exist. (LT G.H. Gardner, Jr., USN, Grow the Green Grass Here: U.S. Naval Institute Proceedings, 82: 137-143, February 1956. Copyright 1956 by the United States Naval Institute.)

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Hodgkin's Disease

The therapeutic activity and clinical use of chloroethylamines have been studied in the Academy of Medical Sciences of the U.S.S.R., Moscow since 1947. While the author started treatment with di-(2-chloroethyl)-methylamine hydrochloride ("embichin"), he began using another chemical compound from 1950 onwards.

This new drug, called "novoembichin," has been widely used since 1952 in the medical institutions of the U.S.S.R. and has now replaced di-(2-chloroethyl)methylamine. During the last four years, novoembichin only has been used in the treatment of Hodgkin's disease. It is given in

larger doses than embichin, usually 9 mg. (less often, 8 or 10 mg.) for adults. The number of injections varies from eight to sixteen. For the treatment of lymphoid leukemia, a dose of 8 mg. is used, and for myelogenous leukemia, 10 mg.

The immediate and remote results of treatment of Hodgkin's disease with embichin and novoembichin according to this method are described. From 1949 to 1955, the author has participated in the treatment of about 300 patients, 100 of them at the Institute of Oncology at Leningrad (1949 - 1951) and about 200 at the Institute of Experimental Pathology and Therapeutics of Cancer and other institutions in Moscow (1952 - 1955).

In such a severe disease as lymphogranulomatosis, which tends to be generalized and to relapse, the results of treatment necessarily depend to a large extent upon the stage of the disease at which it is instituted and upon the type of disease, whether it is of slow or rapid course. Consequently, in order to summarize the results and to make a comparison with x-ray therapy, it was first of all necessary to note the stages of the disease.

The author distinguishes four clinical stages in the course of Hodgkin's disease by analogy with malignant tumors, which are divided into stages in the U.S.S.R.

In the first stage are those patients with the initial form of the disease, in whom the pathological changes are confined to one group of lymph nodes (for instance, in the cervical region) and general clinical symptoms are absent. The disease does not progress for some time in most cases at this stage, apparently owing to the effectiveness of the bodily resistance. This stage, closely resembling the latent period described by other authors, lasts several months, sometimes 1 or 2 years, but is seldom diagnosed as Hodgkin's disease at this period.

The second stage is also the initial period of the disease, but the process is beginning to develop, indicating a failure of the compensatory forces of the body. There are still mild general symptoms with a rise in evening temperature. Granulomatous changes in the lymph nodes and involvement of other nodes, such as in the mediastinum or axillary region, take place, but the nodes are still not greatly enlarged. This stage can be designated the initial progressing stage.

The third stage (the stage of significant spread along the lymphatic system) characterizes the completely developed illness with marked general symptoms, loss of working capacity, fever, and pruritus. The changes in the lymph nodes have progressed and involved many groups of nodes, some of which become much enlarged.

The fourth stage includes patients with anemia, emaciation, loss of working capacity, generalized pathological changes in the lymph nodes, and sometimes pulmonary, pleural, and bony involvement. At this stage, bodily resistance becomes almost exhausted.

The foregoing classification is applied to chronic cases of Hodgkin's disease, as it is almost impossible to differentiate these stages in acute cases and in those running a rapid course. It is difficult to define the early stages in those forms of the disease in which the mesenteric nodes are initially affected. It is advisable to classify patients with chronic Hodgkin's disease according to whether the course is slow, moderate, or rapid.

Of the 300 patients admitted for treatment, about 25% were classified as in the second stage, about 50% in the third stage, and about 25% in the fourth stage.

The treatment gave immediate positive results in nearly all the patients. These included a decrease in size of the affected nodes or their complete regression, disappearance or amelioration of general symptoms such as fever and pruritus, and partial or complete recovery of working capacity. The best results were observed in patients in the second or the beginning of the third stage, with affected cervical, mediastinal, and axillary nodes, who had received no previous treatment, or only one or two courses of radiotherapy. The worst results were observed in patients at the end of the third and fourth stages, particularly those with involvement of the retroperitoneal nodes, and in a number of patients previously subjected to radiotherapy, repeatedly applied to various sites. Occasionally, in such patients, chemotherapy had to be discontinued because of the rapid depression of hemopoiesis.

In spite of good immediate results, relapses were observed in many cases. However, in 4 patients out of 25, whose treatment was started in the second stage (none of whom had been treated previously), no relapses have occurred to date; one was followed up for 3 years, one for 4 years, and the third for 6 years after the first course of treatment, and one patient for 4 years after the second course. Other patients had relapses in 6 months to a year after each course of treatment.

In patients in the third and fourth stages, particularly those with affected retroperitoneal nodes and who had received radiotherapy, relapses occurred earlier, in from 2 to 6 months, seldom later. To prevent or delay relapses, it proved helpful in a few cases to give an additional (prophylactic) course of injections of shorter duration soon after the main course of treatment. In many cases, further courses of treatment during relapses gave the same good results as the first course. It is most important to repeat the treatment at the onset of the relapse when symptoms first appear. If treatment is delayed, not only do relapses occur, but the next stage of the illness sets in, with deterioration in the patient's condition. Even short delays should be avoided, for relapses often tend to progress rapidly. To each of the patients in the present series, from one to six repeated courses of injections of embichin and novoembichin were given. In some cases, repeated courses of injections became difficult owing to the poor condition of the veins, so that radiotherapy was sometimes necessary.

Among the aliphatic chloroethylamines, 2 chloropropyl-di-(2chloroethyl) amine hydrochloride (novoembichin), with a milder side-effect upon the gastrointestinal tract and a weaker action on the bone marrow than other compounds of the series, is the most suitable drug for the treatment of Hodgkin's disease.

The prolonged method of treatment with thrice-weekly injections has been found the most suitable. Usually, 8 to 16 injections are necessary. Injections are continued until the leukocyte count falls to 2500 - 3000 per c.mm. If this fails to produce complete regression of lymph nodes, an additional course of treatment is given 6 weeks later. To prevent relapses, a supplementary (prophylactic) course of injections of shorter duration after an interval of 2 to 3 months has been found useful.

Treatment with chloroethylamines should be given not only in the advanced stage of the disease when x-ray therapy has proved unsuccessful, but also in the early stages.

With such treatment, provided it is given in the early stages and according to a rational method, positive remote results—that is, preservation of life and working capacity for more than 5 years from the beginning of treatment—may be obtained in 50% of cases.

The immediate and late results of chloroethylamine treatment of early cases of Hodgkin's disease are at least as good as those of x-ray therapy.

The above two treatments are applicable in combination, the following two methods having been found useful in the author's hands: (1) an initial course of chemotherapy is given, and this is followed after an interval of 6 to 8 weeks by x-irradiation of nodes which have not completely regressed; or (2) the two methods of treatment are applied alternately in subsequent relapses.

A new drug—2:6-dioxy-4methyl-5-(e-chloroethyl) aminopyrimidine (dopan)—has been developed which, as it can be administered orally and has only a slightly toxic action on the gastrointestinal tract, renders the chemotherapy of Hodgkin's disease more convenient for the patient, one tablet being given twice weekly for 3 to 5 weeks. (Larionov, L. F., Immediate and Remote Results of Chloroethylamine Treatment of Hodgkin's Disease: Brit. M. J., 4961: 252-256, February 4, 1956. Institute of Experimental Pathology and Therapeutics of Cancer, Academy of Medical Sciences of the U.S.S.R., Moscow)

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Aldosterone in Clinical Medicine

The time has arrived for clinicians to become aware of the increasing importance in clinical medicine of aldosterone, the newly discovered adrenal cortex hormone. It has been demonstrated that increased adrenal production

of aldosterone is involved in the pathogenesis of a number of very common clinical disorders. That many more diseases will be found to be associated with increased or decreased secretion of this hormone seems abundantly clear. This prediction is based not only upon the numerous possibilities which exist, but also upon the fact that clinical investigators have merely scratched the surface of this fertile field since the hormone was proved to exist and shown to be measurable.

The purposes of this brief review are (1) to provide that small measure of historical information which is essential for proper orientation to the clinical problems, (2) to delineate and classify the various clinical states in which abnormal production of aldosterone is now known to exist and to speculate upon the existence of others, and (3) to describe in detail primary aldosteronism, the newly recognized clinical syndrome. Emphasis is given to this condition because it is a serious hypertensive-renal-vascular disease and represents the one condition to date of the entire "aldosterone group" which can be completely cured.

The history of aldosterone is still in the making. It goes back only to 1952, when Simpson, Tait, and their co-workers detected biologically, and isolated chromatographically from the "amorphous fraction" of adrenal cortex extract, something which caused intense retention of sodium and diuresis of potassium in adrenalectomized rats. The potency of this material was so great that these investigators realized at once that they were not dealing with any of the known corticosteroids or with any combination of them. They and Farrell and Richards demonstrated the existence of this material in the adrenal venous blood of monkeys and dogs. This constituted good evidence that this substance was a normal secretory product of the adrenal gland. Because of its potent effect upon electrolyte metabolism (30 times greater on sodium retention and 5 times greater on potassium diuresis than desoxycorticosterone) the material was tentatively given the name "electrocortin."

Then ensued in relatively rapid succession, isolation of the compound in pure crystalline form, identification of its chemical structure, and, in July 1955, actual synthesis of the compound.

From the clinical point of view, it had been suspected that the adrenal was capable of secreting a powerful electrolyte-regulating hormone, although it was assumed by many without proper justification that this steroid was probably desoxycorticosterone. The latter has been used to regulate electrolyte metabolism in patients with Addison's disease since Steiger and Reichstein synthesized the compound in 1937. When cortisone and hydrocortisone became available for substitution therapy in Addison's disease, it was quickly apparent that doses of these compounds adequate to normalize organic metabolism (protein, carbohydrate, et cetera) lacked the capacity to maintain normal metabolism of sodium and potassium. It was found necessary to give these patients desoxycorticosterone in addition to maintenance quantities of cortisone or hydrocortisone. Corticosterone, however, was found to provide in a single compound, good replacement therapy.

A table presents a tentative etiological classification of hyperaldosteronism and hypoaldosteronism. Included are the clinical conditions now known to be associated with abnormal production of aldosterone. In addition, it will be noted that names have been given to conditions which are not yet recognized as existing. The authors believe that many of them will be found to occur.

Hyperaldosteronism is divided into two main subgroups, primary aldosteronism and secondary aldosteronism. The former is meant to denote an abnormality of the adrenal cortex which, per se, gives rise to secretion of excessive amounts of aldosterone. Secondary aldosteronism indicates a situation in which excessive production of aldosterone is the result of an abnormality which has arisen outside the adrenal gland. The adrenal then responds normally to an intense physiological stimulus or stimuli capable of evoking increased secretion of aldosterone. Secondary hormonal secretory activities of this nature are usually compensatory and are designed to overcome or buffer a biochemical abnormality which has arisen.

A similar division into subgroups has been assigned to hypoaldosteronism, primary aldosteronopenia indicating an abnormality of the adrenal itself, and secondary aldosteronopenia representing a compensatory reduction of aldosterone production based upon an extra-adrenal abnormality. (Conn. J. W., Aldosterone in Clinical Medicine—Past, Present, and Future: Arch. Int. Med., 97: 135-142, February 1956)

* * * * *

Listeria Meningitis

The organism causing listeria meningitis was first isolated from rabbits by Murray and associates in 1926, and was described under the name of *Bacterium monocytogenes* because of the mononuclear leukocytosis which occurred in these animals.

Before the use of sulfonamides and antibiotic drugs, human listeria infection was usually fatal. Handleman and co-workers reported a patient with listeria meningitis who responded to penicillin and sulfadiazine. Other reported cures, with one or both of these drugs, followed. Broad spectrum antibiotics have been reported used successfully by Binder and associates who used streptomycin and chloramphenicol, and Portero and Despirito who used Aureomycin and chloramphenicol.

The recent literature on human listerellosis would indicate that the infection is quite rare; however, the infection is probably more common than realized. The reason that more cases have not been diagnosed very likely has been due to two sources of confusion with regard to identifying the etiological agent. Because *L. monocytogenes* morphologically resembles the common corynebacteria and also possesses other characteristics of the

diphtheroids, it no doubt has been overlooked and considered a contaminant or nonpathogen. Reports in the literature, early as well as recent, would indicate this to be the case; in fact, some of the recent reports have indicated that the organism was first reported a diphtheroid and then more careful study showed it to be *L. monocytogenes*. Another source of confusion is that *L. monocytogenes* appears as a small round colony with clear zone hemolysis on blood agar quite like colonies of beta streptococci, and the organism has a tendency to form short chains in trypticase-soy broth so that it has been mistakenly assumed to be a beta streptococcus. The recent literature shows at least one report of where the organism was first called a beta streptococcus and subsequently identified as *L. monocytogenes*.

Infections with *L. monocytogenes* have been described throughout the world in both human beings and domestic animals. The organism has been isolated and identified from 27 animal species, and it appears to be primarily an animal pathogen. In domestic animals, it may produce a severe fatal disease such as meningoencephalitis in cattle, sheep, and goats; or the organism may be isolated from animals with little or no indication of illness, in which case a carrier state probably exists. Little is known about the transmission and maintenance of this organism. Because a number of the reported cases of human infection have been in infants but a few days old, it would seem that the infection may occur by way of the placental or vaginal route. The organism has been isolated from the genital tract of several animal species.

It should be emphasized that therapy must be continued until two spinal fluid tests are entirely normal and the patient is clinically well. Portero and Despirito report that insufficient therapy with chlortetracycline and chloramphenicol, at least, may cause the organism to develop resistance to these drugs. In 1945, before sulfonamide drugs were used in the treatment of listerellosis, the mortality rate was 74% in the reported cases. Now, with broad spectrum antibiotic drugs, the patients in the few cases reported have responded well, with the organism showing sensitivity to all agents.

A striking observation in listeria meningitis in both of the authors' cases, and also in those reported in the literature, has been the misleading symptomatology. The newborn infant may have poor feeding, diarrhea, cyanosis, drowsiness, or convulsions. The second case was felt to be a cardiorespiratory case with recurrent apnea until it was suggested that the infant might have a meningitis.

Listeria meningitis simulates tuberculous meningitis in several respects. The spinal fluid may be clear. In both cases, the spinal fluid showed a pleocytosis with polymorphonuclear leukocytes predominating early and then lymphocytes predominating later in the course of the infection. One must consider listerellosis in a case such as this, for if the organism can be isolated and identified, the prognosis may be altered greatly and the prolonged therapy indicated for tuberculous meningitis will be unnecessary.

It is very likely that *L. monocytogenes*, isolated from patients with meningitis, has been called a diphtheroid because of similarity in cell and

colony morphology, or a beta streptococcus, because of similarity in colony appearance on blood agar. This organism is not at all fastidious in regard to cultural and nutritional requirements as is true of the more common bacterial etiological agents of meningitis. However, if this species is kept in mind when examining spinal fluid, and if the isolate is observed carefully for distinctive identifying traits, more cases of *Listeria* infection will be diagnosed. (Mathieu, P. L. Jr., et al, *Listeria Meningitis: J. Pediat.*, 48: 349-354, March 1956)

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Roentgenologic Diagnosis of Ruptured Spleen

Rupture of the spleen, a frequent acute abdominal condition characterized by symptoms and signs of internal hemorrhage and shock, necessitates surgical intervention, usually splenectomy.

X-ray examination of the abdomen is extremely useful in the diagnosis of acute abdominal disease and particularly in rupture of the spleen. It is the purpose of this investigation to determine the significance of the roentgenologic manifestations observed in a group of 43 patients with ruptured spleen, seen at the Massachusetts General Hospital from 1945 to 1955 inclusive.

Of the total group, there were 33 patients in whom adequate roentgenograms of the abdomen were available for review. Nineteen patients had direct or indirect evidence of enlargement of the splenic shadow; in 14, there was no enlargement. Enlargement was demonstrated directly by visualization of the actual splenic outline and was estimated by means of the position of the surrounding structures, particularly the gas-containing splenic flexure of the colon, the left hemidiaphragm and the gas-filled stomach. Enlargement of the splenic shadow is due to a localized collection of blood around the organ, with or without intracapsular hematoma.

In a satisfactory roentgenogram of the normal abdomen, several of the visceral outlines are readily recognizable: the spleen by virtue of adjacent air-containing organs, and the renal outlines and the psoas shadows by the presence of surrounding fat. Experience has shown that these landmarks can be seen in almost all patients, and they should be meticulously searched for in the evaluation of acute abdominal conditions. In the presence of retroperitoneal edema or hemorrhage, or both, around the particular organ, its outline becomes obliterated. Of 33 patients with ruptured spleen, 25 showed complete and 6 partial obliteration of the splenic outline. In only 2 patients, who had intracapsular hemorrhage, was the organ clearly seen.

It should be emphasized that unilateral absence of renal outlines or psoas shadows is diagnostically significant in the recognition of acute abdominal disease. In trauma, retroperitoneal edema or hemorrhage into the normally contrasting fatty tissues results in the loss of outline of the structure

involved. In this study, 18 patients showed complete and 7 showed partial obliteration of the left renal outline. It was sharp and distinct in 8 cases. In 6 patients, the left kidney was displaced inferiorly as determined either by its direct visualization or by intravenous urography. The psoas shadows showed very important changes in rupture of the spleen, usually because of the associated retroperitoneal hemorrhage or edema—a fact that has not often been recognized. Of 33 patients examined, there were 14 in whom the left psoas shadow was completely obliterated; in another 5, it was not seen clearly as compared to the right; and in 14, both psoas shadows were clearly and sharply delineated.

Considerable emphasis has been placed on the value of serration of the greater curvature of the stomach in the diagnosis of ruptured spleen. In this series, there were 16 patients (50%) in whom this x-ray manifestation was present in a questionable to definite degree. Localized indentation and medial displacement of the stomach due to a splenic hematoma and enlargement can also be seen either on plain roentgenograms as outlined by air or by contrast study of the upper gastrointestinal tract. There is associated slight elevation of the left hemidiaphragm, with limitation of movement. The importance of fluoroscopic observation of the left hemidiaphragm cannot be overemphasized, but this procedure may be resorted to only in rare cases when the patient's condition is relatively good.

The fact that the spleen may be ruptured immediately after severe trauma is well known; the possibility of delayed rupture up to several weeks after minor injury with sudden massive intraperitoneal hemorrhage is less well appreciated and should be emphasized. The diagnostic signs of ruptured spleen on the x-ray film vary. In this series of 33 patients, obliteration of the splenic outline, enlargement of the splenic shadow, loss of left renal and psoas shadows, and serration or localized indentation of the greater curvature of the stomach were frequent, and, therefore, should be considered as of diagnostic significance. Inferior displacement of the left kidney and widening of the left paravertebral soft-tissue shadow should constitute additional signs of this acute abdominal condition. Fractured ribs on the lower left are not necessarily a concomitant of ruptured spleen, but their presence should arouse even more critical appraisal of other findings suggesting the diagnosis. Differential diagnosis should include rupture of the kidney and perforation of the stomach and intestine. In a film of the abdomen taken with the patient upright, the presence of free air beneath the diaphragm often indicates perforation of a hollow viscus. Extravasation of contrast material into the parenchymal tissue, with diminution of renal function, points to rupture of the kidney. It should be noted that rupture or contusion of a kidney and rupture of the spleen may be coexistent and their differentiation in isolated instances may be difficult. (Wang, C. C., Robbins, L. L., *Roentgenologic Diagnosis of Ruptured Spleen*: New England J. Med., 254: 445-449, March 8, 1956)

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Metastatic Pulmonary Malignancy

The purpose of this presentation is to emphasize the fact that, in patients in whom there is reasonable evidence that a primary malignancy has been controlled, the presence of a discrete pulmonary lesion is an absolute indication for thoracotomy. Not only is there a fair chance of controlling the metastatic lesions, but the real possibility that a second primary pulmonary malignancy may coexist is ever present. The first point for consideration is then the present status of the primary lesion. Obviously, to the patient with local persistence of disease, or with metastases in other organs, excision of the pulmonary lesion offers no real benefit. Indiscriminate exploration, even in the face of a hopeless prognosis, becomes senseless mutilation. Unfortunately, the only criteria presently available for evaluating the operability of these patients are those obvious factors which are immediately apparent on considering the subject.

In most instances, it has long been known and accepted that the nature of a localized or rounded intrapulmonary density cannot be determined except by histopathologic section. When this circumstance occurs in an individual who has harbored or does at that time harbor a known neoplasm of malignant mien, the probability that the pulmonary lesion is likewise a neoplasm is undoubtedly increased. The inclination has been to consider the pulmonary lesion as representing a metastatic deposit from the original neoplasms because the lungs form such a predilect site for the deposition of such lesions.

The increased incidence of bronchogenic carcinoma, particularly in the male sex, highlights the possibility that a second neoplasm, occurring in a man, would be of such nature. Even though metastatic lesions to the lung may lodge in such manner as to involve the bronchus, the classical roentgen picture is, however, that of a discrete parenchymal shadow. It is that select group that interested the authors. Thus, this study is concerned only with the possible incidence of a bronchogenic carcinoma occurring under circumstances that would be most confused with a metastatic pulmonary lesion. There is no available means of determining whether such a lung lesion represents a metastasis or a new tumor, and at times this is so even when both lesions are subjected to microscopic examination because bronchogenic carcinoma can resemble tumors arising in other organs. From a clinical standpoint, to be able to decide this issue accurately would be very gratifying because it is suggested in the authors' experience that metastatic tumors may remain localized for a reasonably long period of time, even though the possibility of producing daughter metastases must be considered. If advantage were taken of such time, greater assurance might be had concerning the solitary nature of the metastatic involvement as well as further observations concerning the degree of control at the primary site, thereby avoiding some futile operation. On the other hand, the authors are hesitant to take this time for observation because there is no such "period of grace" in the

event the lung lesion represents a second primary carcinoma. Thus, no alternative is left but to be bold in attacking discrete pulmonary densities under such circumstances.

The presence of pulmonary metastases should not be considered to be necessarily indicative of a fatal prognosis. The surgical excision of metastatic malignancy of the lung has been shown to be technically feasible and productive of a significant group of long-term survivors in selected cases. All such patients should be carefully evaluated, and where the primary lesion can be shown to be well controlled, and no other metastases can be found, thoracotomy and excision of the metastatic lesions are indicated. It must also be realized that the mere history of former malignancy, in the presence of a pulmonary lesion, does not necessarily indicate the latter's metastatic nature because in a significant number of cases such a pulmonary lesion actually is a second primary tumor. The differentiation between these two situations is clinically very difficult, if not impossible. Even though failing occasionally, histologic study of these lesions remains the only reasonably satisfactory approach to the question. In the final analysis, however, only time can tell whether judgment in any given case was good or bad. (Kelly, C. R., Langston, H. T., The Treatment of Metastatic Pulmonary Malignancy: J. Thoracic Surg., 31: 298-315, March 1956)

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Monograph on Frostbite -
Translated by Dr. Iser Steiman

The Chairman for the Canadian Defense Research Board has informed the Bureau of Medicine and Surgery that further copies of the subject monograph are no longer available. It is expected that in the near future a more recent bibliography on cold weather medicine will be available and will be published in the Medical News Letter at a future date. (Refer: U.S. Navy Medical News Letter, Vol. 27, Number 4 of 17 February 1956.)

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Standard First Aid Training Course

The Standard First Aid Training Course (NavPers 10081) is a Navy Training Course prepared by the U.S. Naval Training Publications Center for the Bureau of Naval Personnel with technical assistance furnished by the Bureau of Medicine and Surgery. The course is designed for individual study and may also be used as a basic text for group instruction in first aid procedures aboard ship or at naval shore establishments with primary emphasis being placed on shipboard first aid problems. NavPers 10081 may be procured officially from all District Printing and Publication Offices. (ProfDiv, BuMed)

From the Note Book

1. Rear Admiral B. W. Hogan, Surgeon General of the Navy, will visit Navy Medical installations in the Pacific Islands and the Far East at an early date. Accompanying the Surgeon General as advisor and consultant, will be Dr. Paul Dudley White. Enroute, Dr. White will lecture to medical staff personnel and conduct heart clinics at each place visited. The itinerary includes stopovers at Honolulu, T.H., Guam, M.I., Manila, Philippine Is., Tokyo, Japan, and Formosa. (TIO, BuMed)
2. Rear Admiral F. R. Moore, MC USN, Assistant Chief for Planning and Logistics, will visit various naval medical facilities and bases in the Middle East, Europe, and Africa. (TIO, BuMed)
3. Captain L. B. Shone, MC USN, was awarded the National Safety Council President's Medal at a ceremony held in the Pentagon, Friday, March 9, 1956. This medal is given only for successful resuscitation in order to save life by the Schafer Prone Pressure or Holger Nielsen Arm-Lift Back-Pressure Methods; only 2000 medals have been awarded since 1928. (TIO, BuMed)
4. The U.S. Naval Hospital, Memphis Tenn., was host to members of the Memphis-Shelby County Medical Society on 6 March 1956 at a joint meeting of the Society and Hospital Staff. One hundred and five civilian physicians and twenty-six military physicians attended the meeting. The professional program consisted of three papers presented by the Hospital Staff. (USNH, Memphis, Tenn.)
5. Radioactivity was the subject of one of the seminars that were part of the course in Pathology of the Oral Regions given by the Armed Forces Institute of Pathology, March 26 - 30. General practitioners, university teachers of dentistry, and pathologists were among the 115 students from throughout the United States who attended the week-long course at AFIP. (AFIP)
6. Five young scientists who have shown special promise of becoming creative leaders in basic research have been awarded Postdoctoral Research Associateships for advanced study at the National Bureau of Standards. The associateship program is sponsored jointly by the National Academy of Sciences-National Research Council and NBS. (NBS)
7. Construction and presentation of the below named BuMed exhibits at the Aero Medical Association Convention, to be held at the Drake Hotel, Chicago, April 16 - 18, 1956, have been approved:

Aero Medical Acceleration Laboratory, Johnsville, Pa.

Determination of Cerebral Blood Flow Using Radioactive Crypton.
Aeronautical Medical Equipment Laboratory, Philadelphia, Pa.

Anti-Exposure Suit Mark V; Nine Safety Flight Helmet; Summer Flight Suit; Static Pulsating, Vibrating Seat and Back Pads; Two-Piece Flight Suit; Oxygen Equipment; Pressure Suit; and Winter Flight Suit.

U S. School of Aviation Medicine, Pensacola, Fla.

Dynamic Visual Acuity Testing - Cadet Selection

U.S. Naval Medical Research Laboratory, New London, Conn.

Color Target Detectability at Sea

Office of Naval Research, Washington, D. C.

Hoover Cockpit

(TIO, BuMed)

8. A report considers recent progress in the study of 4 types of acute respiratory infections: acute respiratory disease; nonbacterial pharyngitis; primary atypical pneumonia; and the common cold. Sufficient evidence has accumulated to suggest that these 4 types are separate entities, although each type may be produced by more than one distinct virus. (New England J. Med., 8 March 1956; J.H. Dingle, M.D., A.E. Feller, M.D.)

9. A case of a severe fulminating near-fatal anaphylactic reaction following the third intrapleural injection of streptokinase - streptodornase is reported to emphasize the definite antigenicity of the drug which apparently increases with repeated injections. (J. Thoracic Surg., March 1956; W.C. Shands, M.D., J.H. Johnston Jr., M.D.)

10. An analysis of 17 cases of marginal ulcer, occurring in 20 patients, is made. The proper management of marginal ulcer is presented. (Surgery, March 1956; L. Smith, M.D., V.M. Strange, M.D.)

11. The diagnosis of cor pulmonale, heart disease secondary to lung disease, calls for close cooperation between the chest physician and the cardiologist. Inasmuch as the cardiac involvement is rooted in the underlying pulmonary dysfunction, therapy must be directed at both pulmonary and cardiac aspects of the disease. (Dis. Chest, March 1956; G.C. Griffith, M.D.)

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Board Certifications

American Board of Internal Medicine

LT Jack Barrow MC USNR (Inactive)

Lt William B. Buckingham MC USNR (Inactive)

LT David C. Bunch MC USNR (Inactive)

LTJG Merrill C. Daines MC USNR (Inactive)
LT Wilson H. Hartz, Jr. MC USNR (Inactive)
LT Donald K. Hawley MC USNR (Inactive)
LT David A. Howell MC USNR (Inactive)
LTJG George E. Magnin MC USNR (Inactive)
LTJG Edwin L. Slentz MC USNR (Inactive)
LT Morris Statland MC USNR (Inactive)
CDR Marcel P. Thomas MC USNR (Inactive)
LT Irenaeus N. Tucker MC USNR (Inactive)
LT Frank A. Ubel, Jr. MC USNR (Inactive)
LTJG Mark Upson, Jr. MC USNR (Inactive)
LTJG Burton A. Waisbren MC USNR (Inactive)
LT Park W. Willis, III MC USNR (Inactive)
LT Arnold Wollum MC USNR (Inactive)

American Board of Obstetrics and Gynecology

LCDR Robert G. Arrington MC USNR (Inactive)
LTJG Herman L. Earnhardt, Jr. MC USNR (Inactive)
CAPT James P. Moran MC USN

American Board of Ophthalmology

CAPT Virgil A. Beuerman MC USN

American Board of Orthopedic Surgery

LT Frank H. Burchell MC USNR (Inactive)

American Board of Pathology

LT Ralph Fargotstein MC USNR (Inactive)

American Board of Pediatrics

LTJG Isaac N. Gould MC USNR (Inactive)
LT Howard E. Hansen MC USNR (Inactive)
LT Benjamin H. Kennedy, III MC USNR (Inactive)

American Board of Psychiatry and Neurology in Psychiatry

LT Richard S. Blacher MC USNR (Inactive)
LCDR Julius G. Colantuono MC USNR (Active)
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LT Kenneth P. Jones, III MC USNR (Inactive)
LT John I. Langdell MC USNR (Inactive)
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LTJG William J. Tuddenham MC USNR (Inactive)

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LTJG Arthur A. Anderson MC USNR (Inactive)

LT Stuart M. Anderson MC USNR (Inactive)

LTJG George F. Asbury MC USNR (Inactive)

LT James W. Barrett MC USNR (Inactive)

LTJG James H. Cooper MC USNR (Inactive)

LTJG Rudolph G. Matflerd MC USNR (Inactive)

LTJG Oliver J. Purnell, Jr. MC USNR (Inactive)

LTJG Thomas P.E. Rothchild MC USNR (Inactive)

LTJG Edward D. Sullivan MC USNR (Inactive)

American Board of Urology

LCDR Earl W. Clawater, Jr. MC USNR (Inactive)

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BUMED INSTRUCTION 6410.1A

3 March 1956

From: Chief, Bureau of Medicine and Surgery

To: Distribution List

Subj: Ejection Seat Trainers, Devices 6-EQ-2a and 6-EQ-2b

Ref: (a) ManMed Art. 16-60(2) (e)

(b) OpNavInst 3740.3A

(c) BuMedInst 3740.1

This instruction provides technical and procedural information to personnel concerned with ejection seat indoctrination employing the Ejection Seat Trainers, Devices 6-EQ-2a and 6-EQ-2b. BuMed Inst. 6410.1 is canceled.

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BUMED NOTICE 5202

6 March 1956

From: Chief, Bureau of Medicine and Surgery

To: BuMed Management Control Activities (as indicated)

Subj: Fiscal Services Work Measurement Program

This notice cancels BuMed Instruction 5202.1 which required that monthly reports be submitted under the Fiscal Services Work Measurement Program.

DENTAL**SECTION**Dr. Harry Lyons Appointed Honorary Civilian Consultant

The Secretary of the Navy has recently approved the contract to have Dr. Harry Lyons, Richmond, Va., President-Elect, American Dental Association, serve as Honorary Civilian Consultant to Rear Admiral B. W. Hogan, MC USN, Surgeon General of the Navy.

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Dental Personnel Briefs

1. The present percentage grade structure of the Naval Dental Corps appears like this: 26% are in the grade of Captain, 11% in the grade of Commander, 9% in the grade of Lieutenant Commander, and 54% in the grade of Lieutenant and Lieutenant (junior grade)
2. At present, there are four avenues by which a Reserve Dental officer may become a regular Dental officer:
 - a. Through the provisions of Public Law 365. For further information, read BuPers 1120.3C of 10 August 1955, and Recruiting Service Instruction 315.1 of 21 December 1955.
 - b. The Augmentation Program. For further information, read BuPers Instruction 1120.12D of 28 October 1955.
 - c. The Senior Dental Student Program. Further information is available at the Offices of Naval Officer Procurement.
 - d. The Dental Intern Training Program. Further information is available at the Offices of Naval Officer Procurement.

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Reserve Dental Officers Selected for Promotion to Captain

Listed below are Dental officers of the Naval Reserve not on active duty who have recently been selected for promotion to the grade of Captain:

<u>Name</u>	<u>Address</u>
Archer, Evert A.	112 Ravine Forest Dr., Lake Bluff, Ill.
Armbrecht, Edward C.	1060 Chapline St., Wheeling, W. Va.
Armstrong, William E.	Box 626, Staunton, Va.
Beazley, William A.	3839 Wilshire Blvd., Los Angeles, Calif.
Beekman, Abram R., Jr.	15 Champlin Place, Newport, R.I.
Behrendt, Frederick	R. F. D. #1, Long Hill Rd., Millington, N. J.
Belanger, George H.	107 E. Park Place, New Orleans, La.
Blackstone, Clarence H.	20270 Woodbine Ave., Castro Valley, Calif.
Boege, John N.	105 W. Sycamore, Anaheim, Calif.
Brown, Theodore L.	715 Grand St., Alameda, Calif.
Buxton, Samuel E., Jr.	217 Winston Rd., Pinehurst, Portsmouth, Va.
Carr, Harry L.	14925 Glastonbury Rd., Detroit, Mich.
Casper, Michael V.	525 Broadway, South Boston, Mass.
Coleman, George J.	724 Dupont Bldg., Miami, Fla.
Cummings, John P.	1236 N. Kings Rd., Los Angeles, Calif.
Curtis, Leslie B.	8001 Crenshaw Blvd., Inglewood, Calif.
Cutts, William E.	Star Route #2, Goshen Rd., Forrington, Conn.
Dickson, William A.	440 S. Sheridan Ave., Minneapolis, Minn.
Dittes, Robert M.	Veterans Home, Napa County, Calif.
Dunn, Robert L.	62 Andrew St., Manhasset, N. Y.
Edwards, Roger J.	R. F. D., Danvers, Mass.
Eller, Robert L., Jr.	820 Prospect St., La Jolla, Calif.
Farwell, Howard M.	424 Morning Canyon Rd., Corona Del Mar, Calif.
Fitzgerald, Don J.	1012 3rd St., S. W., Mason City, Iowa
Flint, John E.	86 Pilgrim Rd., Rosslyn Farms, Carnegie, Pa.
Fortelka, George C.	129 Southcote Rd., Riverside, Ill.
Frame, Carl H.	15407 Dickens St., Sherman Oaks, Calif.
Gehring, Harry L.	2178 Park Boundary Rd., Louisville, Ky.
Gordon, Edwin V.	#1 Boston St., Guilford, Conn.
Grayburn, Wayne G.	78 Clinton St., S. Haven, Mich.
Hall, William A., Jr.	309 E. 7th St., Michigan City, Ind.
Hanson, Donald F.	2346 43rd Ave. North, Seattle, Wash.
Harris, William D.	69 Elm St., Oneonta, N. Y.
Hellweg, Harold P.	4730 A St., Lincoln, Neb.
Homichko, Nicholas E.	166 N. Lovett Ave., Little Silver, N. J.
Horner, Stuart J.	7 Bowles Lane, Glen Allen, Va.
Hoyt, Charles D.	12 Woodland Dr., Fair Haven, N. J.
Kellogg, Richard M.	610 Jennings Landing, Battle Creek, Mich.
Lachmann, Clarence M.	5637 Artesian Ave., Chicago, Ill.
Litman, Hyman	Box 263, Biwabik, Minn.
Looby, John P.	125 S. 36th St., Philadelphia, Pa.
Moss, Casper A.	1135 W. Huntington Dr., Arcadia, Calif.

Murphey, Phelps John	3702 Fairmount, Dallas, Texas
Nusbaum, Samuel L.	972 Broad St., Newark, N.J.
O'Brian, Howard F.	517 Guelke Bldg., Appleton, Wis.
Orgel, Morris	16 Meadowbrook Court, Freeport, N. Y.
Ostrem, Carl T.	6119 Hickman Rd., Des Moines, Iowa
Pinel, Philip J.	96 Byron Rd., Weston, Mass.
Reaves, Lowry D.	3450 Campbell, Dearborn, Mich.
Redemeyer, Hubert L.	291 Geary St., San Francisco, Calif.
Restarski, Joseph S.	831 Monroe Ave., River Forest, Ill.
Rheiner, Robert N.	21308 Haviland Ave., Hayward, Calif.
Schilling, Louis R.	470 Prospect Ave., Oradell, N. J.
Spector, Benjamin	45 Goldsmith Ave., Newark, N. J.
Taylor, Mack	2 N. Shore Terrace, Danville, Ill.
Tullis, Everett R.	143 N. Court St., Crown Point, Ind.
Wallace, Newton H.	Canton, Miss
Wallace, Curtis O.	P.O. Box 167, Nacogdoches, Texas

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"The Most Traveled Man" in the Naval Dental Corps

The U. S. Naval Dental Corps Casualty Treatment Training Manikin has become one of the most traveled men in the Navy. Mark I, as the manikin has been called, has traveled 53,000 miles since 1953, and has been one of the foremost exhibits at 34 dental and medical meetings. He has been viewed by over 300,000 persons during this time. Mark I and his successor, the improved Mark II who has already traveled 10,000 miles to be at four meetings, have been on the road almost constantly, bringing to many professional men the stark realism of the seriously injured person, and bringing to them the realization of the training they must have in event nuclear warfare comes to this country.

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Naval Dental School Staff Member to Receive Alumni Award

Captain Walter N. Gallagher, DC USN, U.S. Naval Dental School, National Naval Medical Center, Bethesda, Md., has been selected by the Dental Alumni Association of Temple University to receive the Alumni Award for 1956. This award is presented annually at the Founders Day Dinner in May to the person voted the outstanding Dental alumnus of the year.

Captain Gallagher is the author of two textbooks on dentistry and the inventor of a water-control device for dental cuspidors.

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MEDICAL RESERVE SECTION

Reservists' Training Apart from Regular Units

Naval Reservists, officer or enlisted, whose summer residence is not in the vicinity of their parent unit, and other Reservists whose occupation requires seasonal absence from their parent unit may now be temporarily assigned to other drilling units when circumstances as outlined above require their absence from the vicinity of the parent unit.

Subject to the applicability above and certain restrictions, outlined in BuPers Instruction 1300.17A of 22 February 1956, Commanding Officers of Pay units are authorized to issue Temporary Additional Duty Orders Under Instruction to Reservists to report to the Commanding Officer of a Naval Reserve Training Center, Naval Air Station, or Naval Air Reserve Training Unit, as appropriate, near their temporary residence. These assignments may be made without regard to the authorized allowance of that unit.

Commandants are authorized to issue similar orders to Reservists in Non-Pay units. A copy of this authorization shall be sent to the individual's "temporary" Commandant, or the Chief of Naval Air Reserve Training, as appropriate.

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New Medical Department Correspondence Course

The Medical Department Correspondence Course, Medical Department Orientation, NavPers 10943-A, is now available for distribution to eligible regular and Reserve officer and enlisted personnel of the Armed Forces Medical Department. Applications for this course should be submitted on Form NavPers 992 (Rev 54) and forwarded via appropriate official channels to the Commanding Officer, U.S. Naval Medical School, National Naval Medical Center, Bethesda 14, Md.

This course, which is based upon a completely new text, surveys the historical background, mission, functions, and facilities of the Medical Department ashore and afloat. The organization and growth of the Bureau of Medicine and Surgery and the functions of the Medical, Dental, Medical

Service, Nurse, and Hospital Corps are discussed. Detailed information is provided on the organization and services of the various medical and dental facilities of the Medical Department: the National Naval Medical Center, Naval Hospitals, hospital ships, base hospitals, dispensaries, station hospitals, supply depots, research activities, technical training, and hospitals (mobile, field, and permanently based) in overseas areas of operations. Throughout the course, the application of professional skills to naval requirements is stressed.

This course consists of two (2) objective-question type assignments and is evaluated at six (6) Naval Reserve promotion and non-disability retirement points, and is designated as a course that may be retaken for point credit inasmuch as it is based upon a completely new and revised text.

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Officers' Pay Status in Non-Pay Drilling Units

Naval Reserve non-pay units, authorized to conduct 12 or more drills per year, may employ the commanding officer and certain staff members in a pay status provided:

- (1) T unit has a membership of 15 or more persons with each person maintaining an individual certified attendance average of 60% or more per scheduled drill per fiscal quarter will warrant two persons in a pay status.
- (2) Each increment of 15 individuals above the minimum of 15 with the same attendance factor will warrant one additional pay billet up to a total of five pay billets.
- (3) If a unit meets more than 12 times annually, as many as 10 pay periods per unit per month may be authorized.
- (4) Personnel in a pay status may be detailed in advance by the commanding officer to be present at stated drills during the month without regard to the calendar sequence of the drills.
- (5) Pay status personnel other than the commanding officer, including training officers and assistant training officers, will be designated as, and assigned joint responsibilities of, staff personnel. Such staff personnel may consist of commissioned officers, warrant officers, or enlisted personnel.

- (6) It is desired that a rotation policy be instituted whereby different unit members will be detailed to a pay status from quarter to quarter as may be found practicable so that as many members will receive the training and incentive incident to performance of staff duties as are qualified to perform those duties. Because all members of all units will not possess required qualifications to perform staff duties, the considered discretion of the commanding officer must be exercised in nominating members for the pay status pool.

Units are identified by attendance, strength, and the resultant pay status of the unit; the following unit class designations are authorized by BuPers Instruction 7220.9, 8 February 1954:

Unit Class	Minimum Drill Attendance - Quarter Average	Pay Billets Authorized	Monthly Pay Periods Authorized:	
			12 Drills Annually	Over 12 Drills Annually
I	60 or more	5	5	10
II	45 - 59	4	4	8
III	30 - 44	3	3	6
IV	15 - 29	2	2	4
V	14 or less	0	0	0

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PREVENTIVE MEDICINE SECTION

Distribution of Poliomyelitis Vaccine

(This is the third in a series of articles designed to apprise Medical Department personnel of the current status of poliomyelitis vaccine to be used for dependents of Navy and Marine Corps personnel. The preceding articles

appeared in the Preventive Medicine Section of the 3 February and the 2 March 1956 issues of the Medical News Letter. Additional information, particularly on the National Allocation Plan, will be provided in a BuMed Notice to all ships and stations.)

During the month of February, the twelfth and thirteenth allocations of poliomyelitis vaccine were released by the Department of Health, Education, and Welfare, Public Health Service. The Navy received a total of 23,310 cc. of vaccine from these allocations. This vaccine was shipped to continental United States activities in early March. The quantities shipped into each naval district and the total quantities shipped prior to March 15 are summarized in Table I.

Limitations on space prohibit giving details of amounts shipped to individual activities within each district, but an example of the distribution is given in Table II, which shows the quantities shipped to those activities designated by the Commandant of the Fifth Naval District as being responsible for immunizing dependents. The Fifth Naval District has the largest requirement. Activities in other naval districts can easily calculate whether or not they are receiving their full percentage share of vaccine by comparing their submitted requirements, either to the total requirements of their naval districts or to the requirements for the continental United States as a whole.

In Table III, the distribution of poliomyelitis vaccine allocated to the Department of Defense under the National Allocation Plan is shown. Most of the vaccine received prior to 1 January 1956 was sent to overseas activities. The discrepancies in distribution among the Army, the Navy, and the Air Force in subtotal A reflect primarily the differences in the numbers of eligible children for whom vaccine was requested from overseas areas which were assigned geographic priorities in BuMed Instruction 6230.8.

A total of 75,933 cc. of Navy vaccine was shipped overseas prior to 1 January 1956. This included the 18,518 cc. of vaccine donated by the National Foundation for Infantile Paralysis for immunization of children in the first and second grades of school. The remaining total of 76,035 cc. (Table I) has been distributed within the continental United States. Subtotal B shows that the distribution among the Army, the Navy, and the Air Force is essentially equal, the differences being a reflection of the variation in the number of children in the United States for whom each of the Services is responsible.

From Table III, it can be seen that all vaccine, received by the Navy prior to March 15, 1956, has been distributed to field activities and that there is no reserve stock in Navy supply depots. The 23,310 cc. distributed in early March represented all the vaccine that had been received in the supply system between February 6 and March 15, 1956. The twelfth allocation was received in Navy supply depots on 28 February, and the thirteenth on 6 March.

Table I

DISTRIBUTION OF POLIOMYELITIS VACCINE IN CONTINENTAL NAVAL DISTRICTS

District	Two - Dose Requirement in Cubic Centimeters	Cubic Centimeters Shipped Prior 15 March 1956		
		Prior 1 March	During March	Total
First	31,642	4,590	2,025	6,615
Third	12,462	1,818	792	2,610
Fourth	12,612	2,070	819	2,889
SRNC	2,046	369	162	531
PRNC	22,400	3,402	1,494	4,896
Fifth	103,300	15,057	6,642	21,699
Sixth	47,292	6,813	3,033	9,846
Eighth	13,552	1,854	1,008	2,862
Ninth	20,134	3,042	1,305	4,347
Eleventh	64,342	9,351	4,122	13,473
Twelfth	18,188	2,658	1,161	3,819
Thirteenth	11,336	1,701	747	2,448
Total	359,306*	52,725	23,310	76,035

* Latest revisions included.

Table II

DISTRIBUTION OF POLIOMYELITIS VACCINE IN FIFTH NAVAL DISTRICT

Activity	Children		Cubic Centimeters of Vaccine Shipped			
	No.	%	First	Second	Third	Total
NAS Norfolk, Va.....	10,000	19.36	1,170	1,719	1,296	4,185
MARCORBASE, Camp Lejeune, N. C.....	10,000	19.36	1,170	1,719	1,296	4,185
MARCORAIRSTA, Cherry Point, N. C.....	7,500	14.53	873	1,287	963	3,123
NAS, Oceana, Virginia Beach, Va.....	7,000	13.55	810	1,197	900	2,907
NavAmphibBase, Little Creek, Va.....	6,000	11.63	693	1,026	774	2,493
NavHosp, Portsmouth, Va.	4,000	7.74	468	684	513	1,665
FltAirDefTraCen, Dam Neck, Virginia Beach, Va.....	3,000	5.82	342	513	387	1,242
NavHosp, Bainbridge, Md.	1,200	2.32	135	207	153	495
NavAirSta, Chincoteague, Va.....	700	1.36	81	126	90	297
NavMineDepot, Yorktown, Va.....	600	1.16	72	108	72	252
NavAirFac, Weeksville, Va.....	600	1.16	72	108	72	252
Air Force Staff College, Norfolk, Va.....	500	0.97	63	90	72	225
NavRecSta, Baltimore, Md.	140	0.27	27	27	18	72
NavOrdPlant, Louisville, Ky.....	125	0.24	27	27	18	72
NavOrdPlant, South Charleston, W. Va....	100	0.16	27	18	18	63
NavRecCen, Ashland, Ky..	70	0.14	63	-	-	63
NavResTraCen, Roanoke, Va.....	50	0.10	45	-	-	45
NavResTraCen, Cumberland, Md.....	40	0.08	36	-	-	36
NavResTraCen, Lynchburg, Va.....	25	0.05	27	-	-	27
TOTAL.....	51,650	100.00	6,201	8,856	6,642	21,699

The fourteenth and fifteenth allocations have been made, but will not be received in the supply system until late March. The Navy's share of these two allocations amounts to only 9099 cc. for distribution to United States activities and 1422 cc. for overseas distribution. Unless other larger allocations are made within a short interval, the amount available for distribution to individual activities in early April will be considerably less than the amounts shipped in early March. Advance information cannot be obtained on quantities of vaccine to be released for allocation, and, as of this writing, no prediction can be made as to whether such an additional allocation may be made.

At present, nearly all dependent children aged 6 months through 15 years of Navy and Marine Corps personnel located overseas, who desired vaccine, have been supplied. This has been possible because most Navy and Marine Corps personnel with dependents overseas are located in areas which are assigned geographic priorities. The Army and the Air Force have many personnel with dependents located in England and Europe which were not assigned priorities, so that a portion of each allocation to the Department of Defense must still be diverted to take care of these dependents. This is done before the remainder of the allocation is subdivided among the three Services on a fixed percentage basis with the Navy receiving 33.9% of this remainder.

Vaccine distributed in the continental United States has thus far been sufficient for only 42.3% of the one-dose requirements submitted. However, this does not mean that only 42.3% of all dependent children in the eligible age range have had one dose, because an unknown number have been immunized with one or more doses in the National Foundation for Infantile Paralysis program and in various other programs carried out in civilian communities.

A total of 36,245,000 cc. of poliomyelitis vaccine has been released to date by the Public Health Service for all purposes, including the more than 13,000,000 cc. distributed by the National Foundation for Infantile Paralysis. This amount of vaccine would provide one dose for about 75% of all children from birth through 14 years had it all been used for that purpose. Because much of the vaccine has been used in two-dose programs (some children have had three doses and some vaccine has been used in pregnant women), it is estimated that less than 50% of the children in the above age group, nationwide, have had vaccine from any source.

The quantity of vaccine that has been released for intrastate allocation, from which the Navy's allocation comes, totals 21,955,000 cc. This includes the fourteenth and fifteenth allocations.

These data indicate that the Navy's supply of vaccine has paralleled that available to the other branches of the Armed Forces and to civilian children throughout the United States and its Territories. Because of differences in distribution and demand, it may appear in some areas that more vaccine is reaching civilian channels than is available to the Armed Forces, but this is manifestly not true for the country as a whole.

Table III

DISTRIBUTION OF POLIOMYELITIS VACCINE ALLOCATED TO THE DEPARTMENT OF
DEFENSE, August 1955 - March 1956.

Allocation		Total in Cubic Centi- meters	Cubic Centimeters Distributed To				
No.	Date		Army	Navy	Air Force	Dept. State	Public Health Service
	<u>1955</u>						
1	Aug 10	28,866	16,866	6,192	5,808	--	--
2	Aug 20	24,066	24,066	--	--	--	--
3	Aug 31	76,716	30,840	16,494	29,382	--	--
4	Sep 15	41,292	6,050	11,641	20,601	3,000	--
5	Oct 3	45,756	--	28,350	17,406	--	--
6	Oct 19	15,534	12,510	--	3,024	--	--
7	Nov 17	43,833	13,755	16,101	8,037	--	5,940
8	Dec 8	27,918	8,460	2,790	10,728	--	5,940
9	Dec 15	25,488	8,721	8,640	8,127	--	--
Sub-Total A.....		329,469	121,268	90,208	103,113	3,000	11,880
	<u>1956</u>						
10	Jan 3	33,588	11,150	11,043	10,395	1,000	--
11	Jan 9	26,217	8,973	8,883	8,361	--	--
12	Jan 30	51,084	20,808	14,415	12,861	3,000	--
13	Feb 14	22,878	5,607	8,901	8,370	--	--
Sub-Total B.....		133,767	46,538	43,242	39,987	4,000	--
GRAND TOTAL.....		463,236	167,806	133,450	143,100	7,000	11,880

There is a strong possibility that the supply of vaccine will prove insufficient to immunize all children in the priority age range prior to the beginning of the "poliomyelitis season" this year when the demands are expected to increase considerably. For this reason, it behooves all medical officers to learn the facts concerning procurement and distribution of vaccine and to exercise the greatest tact and courtesy in replying to the questions of anxious parents about vaccine for their children. Proper psychological preparation of dependents for this eventuality will probably save many headaches during the summer and fall months.

Concern has been expressed by many about the inadequate supply of vaccine for the administration of second doses at the end of the prescribed interval of 2 - 4 weeks. Evidence has been published indicating that the first dose provided a high degree of protection for children against paralytic poliomyelitis last summer. No harm is done if there is a long interval between the first and second doses. In fact, if an interval of about 6 months elapses, it is quite possible that the second dose will provide the "booster effect" now sought in the delayed third dose and that the third dose could be dispensed with altogether. From a strictly immunological standpoint, the delaying of the second dose until a time nearer to the onset of the poliomyelitic season may provide distinct advantages over the administration of the second dose at the present time.

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Carbon Monoxide from Gasoline Powered Industrial Equipment

Numerous complaints concerning excessive fumes are received each fall from employees assigned to buildings in which gasoline powered industrial equipment is operated. Employees, especially those in supply department warehouses, are reluctant after the weather becomes colder to maintain sufficient natural ventilation through windows and doors. The potential dangers from fumes generated by internal combustion engines and the necessity for constant vigilance, if disastrous results are to be avoided, have been pointed out. Recommendations in the past have included the following:

- (1) Insure by frequent checks that all equipment is in good mechanical condition and that motors are properly tuned up. A motor that is burning oil produces not only excessive amounts of carbon monoxide, but also acrolein, a compound that is irritating to the eyes and respiratory system.
- (2) Stop motors at all times, even for short periods, when equipment is not in use.

- (3) Drive motor carefully; do not race or gun the motor; do not slip the clutch.
- (4) Do not operate in one passageway or in an isolated or close spot for long periods of time. Arrange work, so far as possible, to facilitate operation in alternated passageways.
- (5) Take advantage of natural ventilation by opening doors and windows to the maximum possible extent consistent with weather conditions. It is believed that efforts are made to keep buildings warmer than necessary by closing all ventilation spaces.
- (6) The number of fork lifts operating in any section or building at any one time should not exceed the minimum required to accomplish the work to be done.
- (7) Always warm up motors in a well ventilated space. A cold motor produces more carbon monoxide.
- (8) Consideration should be given, where feasible, to substituting electrically driven equipment on a long range program basis.

(Industrial Health Data Sheet (NavMed 576 - Revised 1953) U.S. Naval Air Station, Norfolk, Va., October 1955)

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Refrigeration of Leftover Foods

Two special epidemiology reports from naval activities, one from North Carolina, the other from California, were recently received in the Bureau of Medicine and Surgery. Both reports described food-poisoning outbreaks which occurred during February 1956. Both outbreaks were the direct outcome of the violation of basic food sanitation principles.

The incident at the California activity obviously resulted from the use on the noon "seconds" serving line of veal fricassee which had been left from the preceding evening meal and had been inadequately refrigerated during the interval between the two meals. Preservation of the leftover veal was attempted by transferring it into a 20-gallon stock pot to an estimated depth exceeding 18 inches. The stock pot was then placed in a refrigerator. Under these circumstances, it would be surprising if veal near the center of the pot had cooled much below room temperature within the approximate 18 hours of refrigeration.

The outbreak in North Carolina occurred when leftover spaghetti and meat balls from a noon meal were offered again on the following day at noon. This time, two 15-gallon stock pots contained the leftovers during the 24-hour holding period.

The Bureau of Supplies and Accounts Manual, Volume IV, paragraph 41657 (1) (b), specifies: "When leftover or warm foods are to be chilled, care must be taken to assure prompt and thorough chilling of the food mass. Foods that are to be refrigerated must be placed in shallow pans to a depth of not more than 3 inches. Such food should not be put in large deep pans as chilling may take so long to get to the center of the food mass that sufficient time is allowed for growth of harmful bacteria and the development of a toxin."

Containers or pans for refrigerating moist unpackaged foods should be constructed of a corrosion-resistant material similar to stainless steel. Either they should be free of seams, or, if seams are necessary, the two or more metal edges should be joined in such a manner that the finished seam is completely closed and smooth. The pan should not exceed 4 inches in depth and should be provided with readily removable covers which have turned down edges to prevent condensation thereon from entering the food containers.

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Special Assistant for Sanitation -
District Public Works Offices

BuDocks Instruction 5450.19 and enclosure (1) thereto explain in detail the authority and responsibility of the District Public Works Officer relative to sanitary engineering matters and outline the duties and responsibilities of the Special Assistant for Sanitation, (Code DD-110), through whom the District Public Works Officer will exercise control of the sanitary engineering matters within the District.

Medical officers and Medical Department representatives responsible for sanitation at naval activities should familiarize themselves with the above instruction. It summarizes minimum control procedures for successful operation and maintenance of sanitary facilities. Such control procedures include the minimum residual chlorine sampling and bacteriological analyses of potable water supplies and sewage effluent.

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The printing of this publication has been approved by the Director of the Bureau of the Budget, 16 May 1955.

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Two-Months Course in Occupational Medicine

Information has been received from Professor Norton Nelson, Chairman, Institute of Industrial Medicine, New York University - Bellevue Medical Center, that a two-months course in Occupational Medicine will be given beginning September 10, 1956.

This is the second year that this short course in Occupational Medicine has been offered. This year, increased emphasis will be placed on preventive medicine and epidemiology in view of the interest of many medical officers in taking the examination for certification by the Specialty Board in Occupational Medicine.

Naval occupational medical officers desiring to attend subject course should make application to the Chief, Bureau of Medicine and Surgery, for this training well in advance.

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